



# UNITED STATES PATENT AND TRADEMARK OFFICE

CH  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,335	05/25/2001	Naomi Sugimoto	209045US2	2280

22850 7590 06/02/2003

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

[REDACTED] EXAMINER

PENDEGRASS, JOAN H

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2852

DATE MAILED: 06/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/864,335	SUGIMOTO ET AL. <i>Un</i>
Examiner	Art Unit	
Joan Pendegrass	2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08 April 2003.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5,7,8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-5,7,8 and 10 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 April 2003 is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR §1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR §1.114, and the fee set forth in 37 CFR §1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR §1.114. Applicant's submission filed on April 8, 2003 has been entered.

### ***Claim Objections***

Claim 8 is objected to because the unit expression in line ten should include a solid line representing division and not the rectangular outline image as presented in the amended claim. Appropriate correction is required.

The specification and claims are objected to under 37 CFR §1.75(d)(1) as lacking conformity therebetween. Claims 3-5, 7, 8 and 10 include the limitation that the oscillation component is configured to oscillate at least ten times within (i.e. during) a period of time in which a given point on the image carrier moves away from a range in which the magnet brush remains in contact with the image carrier. However the specification sets forth that the oscillation occurs ten or more times before a given point on the drum moves away from the contact region, page 41, lines 8-11, for example. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. §112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-5, 7, 8 and 10 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3-5, 7, 8 and 10 are indefinite because the meaning of "a period of time in which a given point on said image carrier moves away from a range in which the magnet brush remains in contact with said image carrier" is unclear.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. §103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR §1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. §103(c) and potential 35 U.S.C. §102(e), (f) or (g) prior art under 35 U.S.C. §103(a).

Claims 5 and 7 are rejected under 35 U.S.C. §103(a) as being unpatentable over Saijo et al. (US 4,825,241) in view of Shoji et al. (US 5,937,228). Saijo et al. discloses main pole N<sub>1</sub>, auxiliary pole S<sub>4</sub>, shortest distance between image carrier 100 and developer carrier 5,6 of 0.5 mm, column 5, line 31, shortest distance between image developer carrier and metering member 8 of 0.75 mm, column 5, line 33, and differs from the claimed invention in not disclosing the particular developing bias used. Shoji et al. discloses developing bias wherein an oscillation component occurs at least ten times during the period of time in which a given point of the image carrier is contacted by the magnetic brush because of the frequency of 2 kHz to 9.5

kHz, column 10, lines 20-26, and having an asymmetrical component reducing a period of time during which toner moves toward the image carrier, Figure 2, and column 10, lines 15-17. It would have been obvious to one of ordinary skill in the art to use the bias of Shoji et al. with the magnetic brush developing device of Saijo et al. in order to develop uniform dots, Shoji et al., column 10, lines 15-19.

Claims 8 and 10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nagao in view of Shoji et al. Nagao discloses image carrier 1, developer carrier 11,12, main pole N, auxiliary pole S, column 4, lines 1-8, a shortest distance between the image carrier and developer carrier of .35 mm, column 6, line 27, and an amount of scooped up developer of 4-6.5 mg/cm<sup>2</sup>, the ratio of which is less than 10, and differs from the claimed invention in the details of the developing bias. It would have been obvious to one of ordinary skill in the art to use the bias of Shoji et al. with the magnetic brush developing device of Nagao as explained in the rejection above.

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,456,806 B2 in view of Shoji et al. The application claims differ from the patent claims in the details of the electric field (developing bias). It would have been obvious to one of ordinary skill in the art to use the bias of Shoji et al. as explained in the rejection above.

*Response to Arguments*

Applicant's arguments filed April 8, 2003 have been fully considered but they are not persuasive. Applicant's argument with respect to an improvement in granularity does not correspond to the language of the claims, 37 CFR §1.111(b) and (c).

Applicant argues that because Saito does not disclose or suggest a bias with oscillation component (AC) that any combination adding an oscillation component is based on hindsight. This is not persuasive because it is conventional in the art to use a bias with oscillation component, Shoji et al. (US 5,937,228), column 1, line 66, to column 2, line 13.

Applicant's argument that the motivation for modifying a reference (by combining it with another reference) must be found in the reference itself is incorrect.

*Contact Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joan Pendegrass whose telephone number is 703-308-2796. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T Grimley can be reached on 703-308-1373. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.



Joan Pendegras  
Primary Examiner  
Art Unit 2852

jhp  
May 28, 2003